2017 Stream Survey Report

PETERSON CREEK TREND SITE

(WBIC 275400)

Waupaca County

Prepared by Joe Dax

Introduction and Survey Objectives

Peterson Creek is a Class I trout stream consisting of 9.32 miles of trout water. Peterson Creek originates in Portage County near the Portage/Waupaca County border. Peterson Creek eventually drains into the South Branch Little Wolf River near ST HWY 49. Brown trout is the dominant salmonid in the lower reaches with mixed brown and brook trout in the upstream areas. Fishing access is very good with multiple DNR managed properties and easements. Extensive habitat development projects have been completed in several areas throughout the stream including this trend survey site. Objectives of the trend survey are to monitor relative abundance and size structure.

Regulations Category: Yellow **Size Limit:** All Trout - 8 inches **Daily Bag Limit:** 3 (in total)

WISCONSIN DNR CONTACT INFO.

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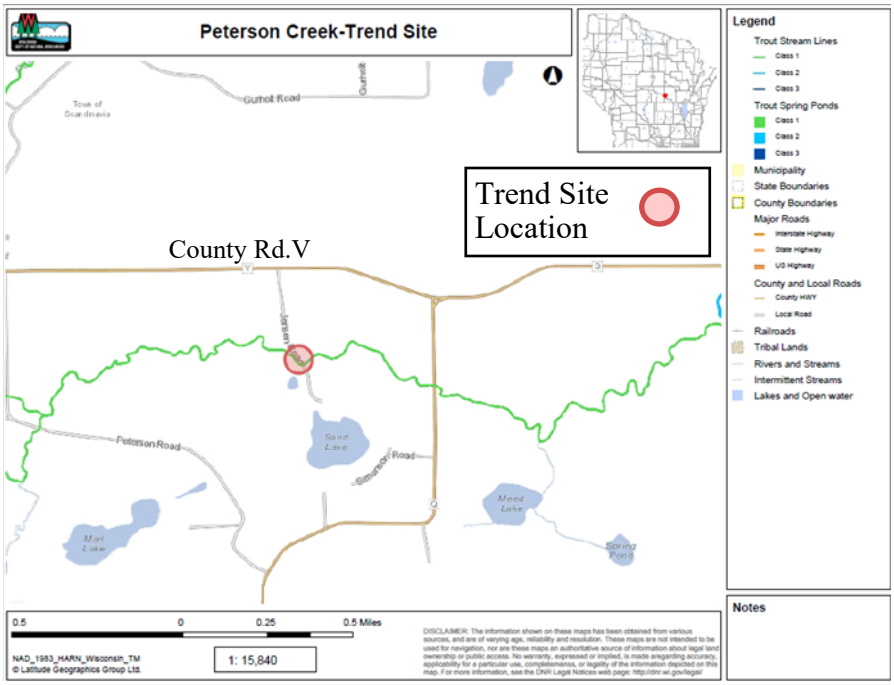
Survey Information						
Site location	**Survey Date**	**Station Length**	**Water Temperature (°F)**	**GPS (Start/Finish)**	**Gear**	**Number of Netters**
Jensen Rd Trend Site	07/31/2017	2,000 ft.	58	44.3589, -89.1681 44.4354, -89.1768	Towed Barge Shocker	3



Metric Descriptions

- **Catch per unit effort (CPUE)** is a method of quantifying fish population relative abundance. For all trout surveys, we typically quantify CPUE as the number of a given size class of trout captured per mile of stream. CPUE indexes are compared to other trout streams throughout the state of Wisconsin by what percentile (PCTL) they fall out in . For example, if a CPUE is in the 90th percentile, it is higher than 90% of the other CPUEs in the state. CPUE percentiles can also be used to categorize trout abundance as low density (<33rd percentile), moderate density (33rd - 66th percentile), high density (66th - 90th percentile), and very high density (> 90th percentile).
- **Length frequency distribution** is a graphical representation of the number or percentage of fish captured by half inch or one inch size intervals.

Survey Method

- The Peterson Creek trend site has been surveyed annually since 2005. This particular trend site historically was 3,000 feet in length until it was shortened to 2,000 feet in length in 2016. The trend site is electrofished with a towed barge stream shocker. All captured trout are identified to species, measured for length, and examined for fin clips.
- Metrics used to evaluate fish populations include catch per unit effort by size class and length frequency distributions.

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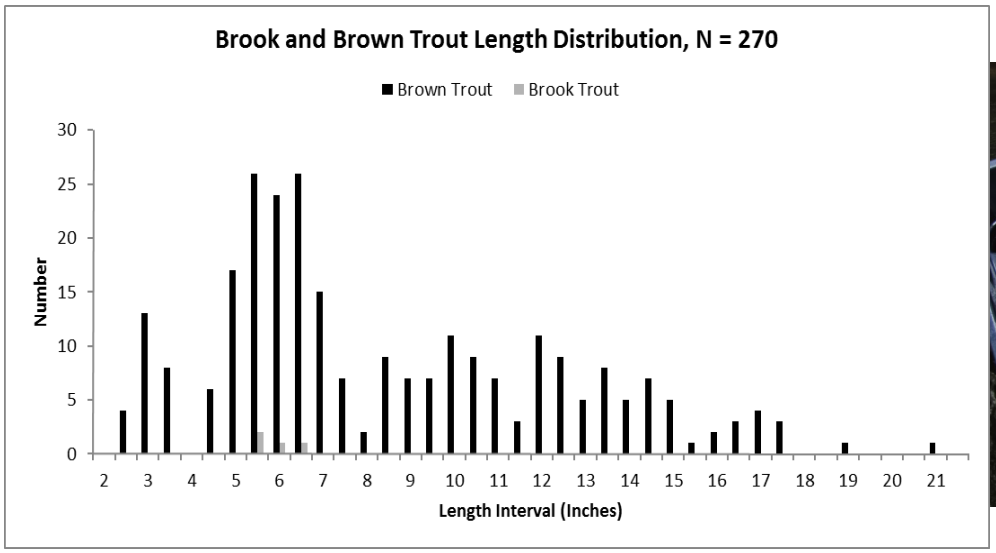

Size and Abundance (CPUE) Metrics - Brown Trout										
Year	Average Length (Inches)	Length Range (Inches)	Number Sampled	CPUE calculated as the number of trout of a given size per mile (Number in parentheses represents the statewide percentile of a given metric)						
				Total CPUE (PCTL)	YOY CPUE	≥6" CPUE (PCTL)	≥8" CPUE (PCTL)	≥10" CPUE (PCTL)	≥12" CPUE (PCTL)	≥15" CPUE (PCTL)
2005	7.9	(2.9-20.0)	115	434 (70th)	57	291 (75th)	77 (60th)	55 (65th)	60 (85th)	19 (90th)
2006	8.5	(3.0-21.5)	431	759 (80th)	74	511 (85th)	356 (85th)	243 (90th)	150 (95th)	63 (95th)
2007	7.5	(2.5-24.2)	443	780 (80th)	185	452 (85th)	296 (85th)	197 (85th)	113 (90th)	39 (95th)
2008	7.5	(2.0-19.7)	390	569 (80th)	100	305 (80th)	194 (75th)	127 (80th)	79 (85th)	19 (90th)
2009	7.9	(2.3-25.2)	338	595 (80th)	178	373 (80th)	257 (80th)	185 (85th)	118 (90th)	42 (95th)
2010	8.4	(2.8-20.0)	234	412 (70th)	44	285 (75th)	178 (75th)	136 (80th)	72 (85th)	23 (90th)
2011	8.5	(2.2-20.9)	238	628 (80th)	69	480 (85th)	195 (75th)	134 (80th)	106 (90th)	47 (95th)
2012	10.1	(2.5-20.6)	418	736 (80th)	48	621 (90th)	539 (90th)	393 (95th)	224 (95th)	72 (95th)
2013	10.9	(2.6-24.0)	231	407 (70th)	7	368 (80th)	312 (85th)	239 (90th)	157 (95th)	56 (95th)
2014	8.0	(2.1-20.9)	196	345 (65th)	32	184 (65th)	109 (65th)	90 (75th)	68 (85th)	30 (95th)
2015	8.2	(2.5-21.2)	118	208 (55th)	16	158 (60th)	72 (55th)	46 (60th)	30 (70th)	19 (90th)
2016	8.9	(2.7-17.8)	188	496 (75th)	32	422 (80th)	169 (75th)	118 (80th)	71 (85th)	21 (90th)
2017	8.8	(2.5-21.0)	266	702 (80th)	66	507 (85th)	317 (85th)	251 (90th)	172 (95th)	53 (95th)

Summary

- Results from the 2017 survey showed that Peterson Creek continues to provide one of the best brown trout fisheries in the state of Wisconsin. Total catch per unit effort ranks in the 80th percentile, the density of all adult size classes ranks at the 85th percentile of higher, and the density of brown trout ≥12.0 inches and ≥15.0 inches rank in the 95th percentile when compared to trout streams throughout the state of Wisconsin. Anglers have the opportunity to catch both numbers and trophy sized brown trout in Peterson Creek. Brown trout ≥20.0 inches were captured in all but two years going back to 2005 and brown trout ≥24.0 inches were captured in three years since 2005.
- Four brook trout were captured at this location. Brook trout are found in higher densities in the upper reaches.
- Brown trout young of year (YOY) relative abundance in 2017 increased 106% from what was observed in 2016 and was the highest observed since 2011. Consistent recruitment should continue to provide a high quality brown trout fishery into the future.
- It is recommended that easement and/or land acquisition efforts focus on other stretches of Peterson Creek. Significant habitat work has been completed within the section of river where the trend site is located because a fishery easement exists there. The superb habitat within this stretch of river is likely why the brown trout grow so well. Habitat work can not be completed on other stretches without first securing an easement or land acquisition.